

Dec - Jan 1985

TWIN CITIES ATARI INTEREST GROUP

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Twin Cities Atari Interest Group
684 Queen Avenue South
Richfield, MN 55423



Next TAIG meeting
Sunday, Jan. 13
Intrest Groups 6:00 p.a.
TAIG 7:00 p.a.

St. Louis Park Rec. Center
5005 west 36th Street
St. Louis Park, minnesota

REMEMBER Dec. and Jan.
meetings have been combined.



Ed's Notes
by Dave Stengel

No, my name is not Ed. I happen to be the other half of the editing duo. May I take this time to mention that if you would like your article to be published sooner, send it to me. There is but one good answer for this. I own the printer.

Now for a word on getting the article to us. Mail it, for now, or get it to either one of us, preferably me, at the meetings. As soon as Phil finds his 850 interface you will be able to download your article to me, not Cory.

I complain like this because I get no mail, so be a good sport and send me an article or two.

Finally, for all you Hitchhiker fans out there. There is another book added on to the trilogy. Its title is the same phrase Ralph used in his "goodbye newsletter."

So Long and Thanks for all the fish

Forth Notes #5
by Bob Floyd

This time I'll cover the GENERAL UTILITIES/VIDEO EDITOR package of valFORTH. This is a MUST item to own. First of all, the video editor is very good. It has a 16 row by 32 column screen editor. This means you can move the cursor to the position on the screen you wish to type on or alter. There is also a 5 row by 32 column visible buffer that allows you to move whole lines from the screen to the buffer and vice versa. The buffer can be extended beyond 5 rows, but you can only see 5 rows at a time.

valFOURTH typically uses 1/2 K screens for typing and editing programs (i.e., 16 rows x 32 columns = 512 bytes). Screens are like "windows" to see portions of your program. A screen actually represents 4 sectors of your disk. So your pro-

gram never resides in computer memory. Only the compiled (or LOAD'ed) version is in memory. Thus when you LOAD a program, the compiler reads the disk screens. A continuation word (--> or ==>) is used at the end of the screen to paste one screen to the next for LOAD'ing. If the continuation is missing, then compilation stops on that screen. For example, 5 LOAD could load more than one screen-it only starts compiling at screen 5. There are 179 on a disk numbered 1 to 179. Apparently screen 0 is not used (sectors 1-4).

There are many useful commands on the screen editor. These are a lot similar to using a word processor. They are better experienced, than explained. Suffice it to say that Atari's editing keys are supported plus much more.

The GENERAL UTILITIES section has a few interesting capabilities such as arrays, CASE structures, GR. 8 text output, double numbers, keystroke words, miscellaneous utilities and string words. The final 3 and CASE are probably the most useful. CASE structures will be covered in a future article. Keystroke words contain these words plus many more:

INKEY\$ - a non-waiting routine for keyboard input.
Y/N - waits for a Yes or No response from the keyboard.
RETURN - waits for a carriage return from the keyboard.
>SCD - converts from ASCII code to screen code.
SCD> - opposite of >SCD.

Also note that "KEY" from the main package can be used instead of INKEY\$ to wait for keyboard input. Miscellaneous utilities contain the following words plus many more:

XR/W - an extended read or write of disk sectors.
SEC - pause of a desired number or seconds.
MSEC - pause of a desired number of milliseconds.
TBIT - toggle a bit within a byte on stack.

SBIT - sets a desired bit.
RBIT - resets (or unsets) a bit.
?BIT - returns a flag denoting whether a bit is set.
STICK - machine language routine that reads the joystick & returns the horizontal & vertical components (i.e. -1, 0, or +1).
STRIG - reads joystick trigger.
PADDLE - reads paddle value.
PTRIG - reads paddle trigger.
BRND - returns a 1 byte random #
16RND - returns a 2 byte random #
DUMP - dumps memory as hexadecimal and ASCII both.

String utilities contain these words, string contracts/variables, and more:

UNMOVE - universal memory move.
#IN\$ - reads a string from the keyboard.
#. - print string.
\$! - store string (to a variable or other).
\$+ - concatenates (adds) two strings together.
VAL - converts a string to a #.
STR\$ - converts a byte to a \$ of length 1.
MID\$,RIGHT\$,LEFT\$ - extract a portion of a \$.
\$COMPARE,\$=,\$<,\$> - string comparison words.

An example of the use of these words is to read a # input from the keyboard. To do this, #IN\$ and VAL are used together. VAL sets a status flag in case the string cannot be converted to a number.

This article should have given you a good idea of the power of the package and FORTH in general. This is probably the best package of the bunch. Next time I'll go over the Player/Missile Graphics package.

Ed: That's one language out of the way!

ANALOG BREAKS THE ICE

We will continue with the language section of the newsletter but first a message from our sponsor:

The club has a disk subscription to ANALOG magazine, which is a magazine devoted to the ATARI computer. TAIG members who purchase a subscription of the magazine may buy copies of the monthly diskettes as long as they remain subscribers to ANALOG. Proof of subscription is initially required and will be occasionally repeated to verify current subscribers. This consists of bringing in the magazine with the address label on the cover. Disks are available for back issues. All disks are sold at a price of \$4.00.

ANALOG has published a compendium which contains 89 files from the first 9 issues. Copies of these disks are available to anyone thru TAIG at a cost of \$9.00 for sides 1-4, and \$4.00 for sides 5-6 (assembly programs). The club does not have copies of the compendium book, but it may possibly be purchased at a bookseller such as B.Dalton.

ED: Amen!

ATARI PASCAL 1.0 by MJN

ATARI PASCAL, released via APX, contained many bugs that prevented it from becoming a useful language option for the ATARI computer. Recently several events have caused a few of us at SPERRY to re-evaluate the version 1.0 release and attempt to "fix" it. Our attempts to "fix" it have been successful so far, and not only have we fixed the major bugs, but in doing so we have found three undocumented commands as of this writing. In addition we have fixed the chaining procedure, and found how to insert and execute the machine language subroutines within the pascal code. Of the three undocumented functions the first called the POWER function does not work at all, the second discovered

function, EXP10, doesn't work correctly, and the third, X10, works very well thus providing a huge increase in input/output power above the other pascal input/output functions. After fixing as much as we could, programs were ran to try and test all of the functions and procedures listed. The testing found only one command that did not work, this was the swap function; in addition, testing showed that floating point functions didn't operate with the fast chip. The changes that we made are all very simple, because they are all in the include files supplied with the pascal or are doc (documentation) and usage errors. For example, in the chaining example present on page 33; change the VAR "chainfil:file;" to "chainfil:anyfile;" and it should work. There I just fixed chaining for you. In further articles I will describe all the other include file changes, then how to use the X10 and machine language subroutine features that were found.

HOOKING UP THE MOV's by Gary Robinson

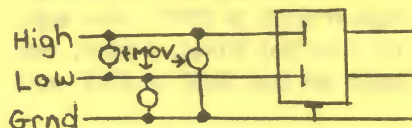
Regarding the surge suppressor Bennet Porter talked about in the November newsletter, I have attached a schematic (below) of the hook-up and the source for the MOV's. I hope this is of some help.

For more info write either:

Gary Robinson
2461 So. Lake George Dr.
Cedar, MN 55011
753-3147

DigiKey Corp.
P.O. Box 677
Thief River Falls, MN 56701
1-800-DIG-IKEY
(344-4539)

ZNR MOV's - P/N P7064 - \$1.38 each



B.A.S.I.C. PROGRAMING by David Stengel

Well, after beating around the bush, we finally come to the final article on languages for this month (I think). Before we begin typing things in there are a few items you should know. For all you who know about the CPU, RAM, ROM, and others please stand by. First of all, the Central Processing Unit (CPU) does all of the actual computing. It is the part of the computer that does the interpretation of BASIC code to machine language code. It also does the arithmetic computations. Next comes the Read Only Memory or ROM which has a set program, a set of instructions, that tells the computer how to respond to messages from the outside world. The RAM or Random Access Memory is the storage place for the user's program. Just in case your wondering what exactly a program is; it is a code typed in by the programmer to make the computer do execute certain operations. In other words, it's a set of instructions that makes the computer do something you want it to do. May I state one more thing before we program? Good, I knew you would agree. The keyboard, or what you type on, is called the INPUT device and the television screen or CRT is known as the OUTPUT device. It's not very important that you know this information, so I'm not going to go into great detail. Now let's get on with the fun stuff. The first command I will teach you is the remark statement or REM. This statement allows you type in anything on the computer without effecting what goes on inside. It is mainly used for adding footnotes to your program, or telling what a certain portion of your program does:

REM --THIS IS A REMARK STATEMENT--

The footnote must follow the REM statement or you will get an error message. I, personally, do not use

the REM statement, because it takes up too much memory. By the way, before I go any further, I would like to mention that each statement you type must begin with a line number:

```
10 (line number)
```

```
10 REM --THE 10 IS A LINE NUMBER--
```

In most cases, I do my numbering in sets of ten. That way I can insert another line between two others:

```
10 PRINT "MY NAME IS"
```

```
20 GOTO 10
```

```
10 PRINT "MY NAME IS"
```

```
15 PRINT "JOE SHMOO"
```

```
20 GOTO 10
```

To execute a program type RUN. This will "RUN" the program for you. The last statement, for this month, is the PRINT statement. It is pretty self-explanatory. Here the statement works:

```
10 PRINT "HELLO."
```

All you do is type PRINT, and type what you want to appear on the CRT (screen) in quotes. Just one last statement, before I stop. The GOTO statement. It is used to GO-TO another line. It is important that you do not separate GO and TO. It is used as one word:

```
10 PRINT "HELLO."
```

```
20 GOTO 10
```

This will print "HELLO" until you hit the BREAK key, which is used to stop a program during execution.

Well, that is it. I'm not going to tell you anymore until next month, so goodbye and seasons greetings.

Ed: Hope I did not make things too clear.

ADVENTURING by Dave Stengel

Welcome to the BRAND NEW column for all you adventure fanatics out there. If it seems I cut my BASIC column a little short, this is why. I do not have many answers to give on how to get through certain parts of an adventure game, because I did not get any questions yet. But that is not your fault, because this is the first month the column has been printed. So, I will reveal some of my latest adventures and give you a list of the adventures I have solved.

Let's start off with the oldest of the new, Sorcerer. I will say from the start, that this is a very good adventure. I have not yet had the pleasure of playing Enchanter, but that has not stopped me from almost solving Sorcerer. Like Zork II it is a totally different adventure, and can be done without first playing the first in the series. My trouble is in the coal mines. Don't be reluctant to play this, like I was. It is very well written, and if you liked the Zorks you'll love this series.

The next in line is Cutthroats. This is another one by Micheal Berlyn, the same person who wrote Suspended and Infidel. Like Infidel, this was kind of a disappointment. It has a good plot and storyline, but it lacks danger and excitement. I also notice in most of Micheal's adventures that in order to solve the game, you have to do things in a certain order, unlike Zork where I run around and solve it in any sequential order I please. Unfortunately, this is also true with his newest, Cutthroats.

Well, I just have to get this off my chest. I have a working DEMO copy of GRUDS IN SPACE. You might not know that Sirius, I think, went under and that GRUDS IN SPACE will

probably not be released. Well let me tell you that this is a pity. I thought GRUDS was probably the best graphic adventure I have seen in a very long time. The DEMO is a complete adventure, not just a slide show. I have solved it and will be selling it with BLADE OF BLACKPOOLE at the next meeting for about twenty dollars. If you would like it sooner, just give me a call.

Enough reviews. Here is a list of all the adventures I have solved so far:

Infocom-

- 1)Zork I,II,III
- 2)Deadline
- 3)The Witness
- 4)Planetfall
- 5)Starcross
- 6)Infidel
- 7)Seastalker

Previously working on Sorcerer, Cutthroats, and Hitchhiker's.

Graphic-

- 1)The Wizard and the Princess
- 2)Ulysses and the Golden Fleece
- 3)Blade of Blackpoole
- 4)Gruds in Space

Previously working on The Mask of the Sun, and Sands of Egypt.

Any others, please inquire. I still may be able to help you. I have my sorces. If anyone can help me on the ones I am working on please do. I can also probably help you on the Ultima series, too. On some of the older adventures, you may have to wait awhile for my response. It has been quite a long time since I have played them.

Good place
for an Ad!

Other Ed's Notes
by Cory Johnson

By now you will have seen the column by the not an Ed, so I will not do all the whimpering that Dave did, because I did get a letter from a club member. See looking up the MOV's. Concerning the comments Dave made about the modem, I have a source of income, and will have a modem by the end of Jan. This modem and the deal for it is listed below.

My first real notes concern the Dec. ANALOG, if you read it, you should know that, being a Christmas issue, it contained a list of stocking stuffers. Well, a company called At-A-Glance is located in New Jersey, not New York and the phone number is (201)267-0998, not 267-0998 as it said on page 74. By the way, they sell keyboard templates and printer drivers. Ben Porter purchased an Okidata printer driver, and it does everything it's supposed to, except it can not do double column printing.

On to other notes. The bargains I found during the year. The major bargain of the year was, oddly enough, a step down in hardware. Dayton's, Ridgedale was selling their stock and demo items for low prices. But they were selling 1010 cassette recorders for \$9.97(that is not a misprint) marked down from \$99.97(that is not a misprint). Yes it came with everything, cables, cords, a recorder, a box and plenty of styrofoam. The most important thing is, of course, that it works.

Software bargains are only bargains depending on your view of software. As Dave has we picked up Gruds at the Computer Show, it wasn't an entire loss, but that is not a bargain, that is a good purchase. The bargains consist of cheap software, cheap. The best place to pick up cheap software is

Kay-Bee toys, again in Ridgedale. They seem to be keeping Datacast Software in business. Their games are not the ultimate in graphics or sound or playability, but they seem to work. I bought a game called Night Raiders, a very poor Zaxxon imitation, but it seems to keep my brothers occupied, of course then, the attract mode keeps them glued to the screen, you can decide how good it is. I may write a review of it in another newsletter, if I become extremely bored and masochistic. Most of the games at Kay-Bee are less than \$10.00.

The non-bargain of the year is given to E Dalton book stores, again the store in Ridgedale, they were trying to sell Enchanter by Infocom for \$49.95, with careful shopping you can get it for about \$23.00 less. Come on you guys, do you want to sell it or keep it on the shelves for ever???

Another bargain was advertised in a newer ANALOG or ANTIC, I can't find the magazine, I think I let someone borrow it, and I'll never see it again. But, anyway, a company was selling 1030 modems with public domain software that allows up and downloading, for about \$80.00, I don't know the exact price, I don't have the magazine.

So the moral of the bargain is, keep your eyes open, and stop buy a department store at least twice a day, and you will find a good deal. The retailers do not want to be stuck with something they can't sell, and Atari does seem rather unstable at the time.

Oh I almost forgot, I bought an Entertainer kit for \$45.00 and a Programmer kit for \$15.00 both at the New Hope K-mart, you thought I was going to say Ridgedale. The programmer consists of a BASIC book a BASIC reference manual, and a BASIC cartridge. The cover prices for the two books adds up to about \$15.00 alone, so the cartridge was

free. But your saying, "I own an XL what good is a BASIC cartridge?" I have not figured that out yet. The Entertainer kit consisted of 2 joysticks, a Missile Command and a Star Raiders cartridge. The price wasn't bad since they wanted \$35.00 for Star Raiders alone. (that was about 5 months ago)

One final note, does anyone know what you use a "pause" button on a computer cassette player for??

This is an apology for all the typo's in the above article, and for the masthead. First, the article. I had the article all typed and proofread, and when I went to print it out, I couldn't find the disk. So I ended up re-typing it the morning we were sending the newsletter to the printer.

The masthead on this this newsletter should not be there. We do not have the real masthead, and I suspect that Ralph Jenson does. If this is the case, would you or who ever does have it, get it to either Dave or I before the next newsletter goes out. Thank you.

Compute!'s Personal Telecomputing
by Don Stoner

A Review by Dick Johnson

Have you ever wondered what you can do with a modem or if it's worth it to sign up for CompuServe or the Source. Well this book should make the decision easier for you. I took over the operation of the TAIG BBS about 4 months ago and found out really how little I knew about telecomputing. So I started picking up copies of Link-Up magazine, reading articles and even bought the CompuServe starter Kit. But I still didn't feel comfortable with it, especially with CompuServe where it was costing me \$6 per hour to learn what I was doing. The starter kit included a book on using the service but it sure seemed to spend a lot of time describing EMAIL (something by the way you can't do until you sign up for a subscription) and very little about SIGS (Special Interest Groups) of which I was very interested. But more about this later. So I started looking for a good book on Telecomputing, but all I seemed able to find were huge, expensive reference books full of Data Base Services such as Horse Breeders International and Brain Doctors Exchange. And then I found it "COMPUTE! PERSONAL TELECOMPUTING" (I bet you were wondering if we would ever get to the review). Don has done a wonderful job of describing using a modem and accessing data bases. And even though the last 2 chapters (Terminal & Host Programs) are written for the Commodore I can still highly recommend it since the rest of the book is generic in nature as is telecomputing itself.

Chapter 1 - Getting Started: Its interesting to note that the first thing Don recommends is to get a friend or join a user group to help you get started, this of course is the best means since they can direct you as to what is

availab. your computer in terms of soft & hardware. This first chapter is a general introduction to telecomputing and offers some interesting information, such as have you ever wondered why its twice as expensive to use 1200 baud on the Source as 300 baud. It has to do with the line charges they have to pay and a system call Packet Networks which allows many users to use the same line at the same time by concentrating your transmission and sending at 9600 baud along with the other users. This actually keeps the cost down but since a 1200 baud user is going to use as much space on the line as four 300 baud users its going to cost more.

Chapter 2 - Modems and Telecomputing: Gets into the technical details and explains all those confusing terms like Baud, Parity, Duplex, RS-232 and Modulation. It also includes the instruction for wiring a cable from the Atari 850 interface to a standard RS-232C port (the standard for most modems). I sure could have used this information earlier when I had to make such a cable.

Chapter 3 - Bulletin Boards: Don takes you on a guided tour of several BBS in the Seattle area showing the actual messages sent and received besides going into a little history and discussion of the types of BBS's.

Chapter 4 - Exploring CompuServe: This has to be one of the main reasons I like this book. After all at \$6 (300 baud) to \$12.50 (1200 baud) per hour I plan to get my moneys worth when I'm using this service. As in chapter 3 Don takes us on a guided tour of CompuServe showing us how use the menus and how to use the short cuts. One of the interesting parts of the tour is a visit to the Atair SIG which is like a BBS within a BBS. CompuServe has many such SIGS covering different computers and different subjects. Like a BBS you can sent and

receive messages and Up & Download files. You can also compose your messages before signing on to CompuServe Upload them to your file space and transfer them to Bulletin Board saving time and money. One more special note NEVER NEVER disconnect your modem to logoff a Data Base, it takes 15 minutes before they decide your gone (seems overly long to me) which adds up to at least \$2 down the drain. P.S. the Starter Kit does contain a lot of good information and it does contain \$30 worth of connect time (5 hrs). CompuServe also features Home-Shopping, Games, News, CB chatter and many other features

Chapter 5 - The Source: Like chapter 4 this is another tour and discussion. The Source is very much like CompuServe but more business orientated. The rates a \$7.75 (300 baud) and \$10.75 (1200 baud) with a \$10 monthly minimum. \$100 signup cost is also required although this is often discounted to \$20. Some of the features of the Source are UPI (news wire), Comp-U-Store (shop at home), The Post (like SIGS) and Chat (CB style)

Chapter 6 - Some Other Data Bases: Briefly cover some of the more popular Data Bases: AgriData, Billboard, Delphi, Dow Jones and others

Chapter 7 - Free Software: Talks in general terms about the process of Uploading and Download protocols and programs. The only programs mentioned for the Atari are JTERM (published in Compute) and AMODEM.

Chapter 8 - Terminal Programs & Chapter 9 - Host Programs: Programs for Commodore and will be of little interest to all Atarians but the most technically orientated.

In summary I think this book is well worth 12.95 even if you don't own a modem in order to get a feel for using one and to decide if you want to get started.